User Defined Functions

In Python, there are different ways in which we can define user defined functions. We can define functions by changing input arguments and return values.

Consider below application which demonstrate concept of User Defined Functions

print("---- Marvellous Infosystems by Piyush Khairnar-----")

print("Demonstration of Advanced Functions")

 # Function which accepts nothing and return nothing

```
def Marvellous1():
    print("Inside Marvellous1")
```

 # Function which accepts value and return nothing

```
def Marvellous2(value):
    print("Inside Marvellous2")
    print("Accepted value is ",value)
```

 # Function which accepts value and return value

```
def Marvellous3(value):
    print("Inside Marvellous3")
    print("Accepted value is ",value)
    return value+1
```

 # Function which accepts multiple values and return multiple values

```
def Marvellous4(value1, value2):
    print("Inside Marvellous4")
    add = value1 + value2
    sub = value1 - value2
    return add,sub
```

 # Function which calls another function which is defined outside it.

```
def Marvellous5():
    print("Inside Marvellous5")
    Marvellous1()
```

 # Function which contains another nested function defined in it.

```
def Marvellous6():
    print("Inside Marvellous6")
    def InnerFun():
        print("Inside InnerFun")
    InnerFun()
```
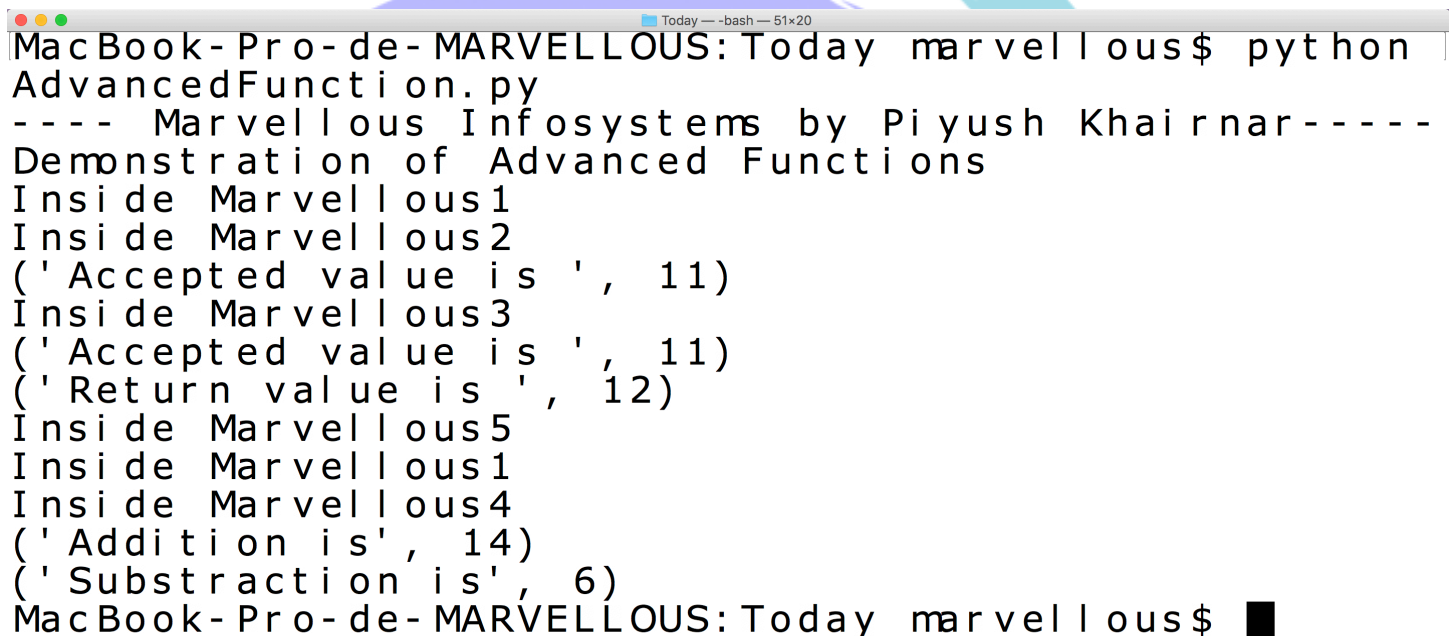
Function calls for above functions

no = 11

Marvellous1()
Marvellous2(no)
ret = Marvellous3(no)
print("Return value is ", ret)

Marvellous5()

ret1,ret2 = Marvellous4(10,4)
print("Addition is",ret1)
print("Substraction is", ret2)

Output of Above application

```
MacBook-Pro-de-MARVELLOUS:Today marvellous$ python
AdvancedFunction.py
---- Marvellous Infosystems by Piyush Khairnar-----
Demonstration of Advanced Functions
Inside Marvellous1
Inside Marvellous2
('Accepted value is ', 11)
Inside Marvellous3
('Accepted value is ', 11)
('Return value is ', 12)
Inside Marvellous5
Inside Marvellous1
Inside Marvellous4
('Addition is', 14)
('Substraction is', 6)
MacBook-Pro-de-MARVELLOUS:Today marvellous$ ■
```